

Evaluating the HR function as being a factor of supply chain performance: Case of industrial companies in Morocco

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Abstract. In an economic environment increasingly complex and competitive, firms are now aware, more than ever, of the importance of controlling the human resources function as a primary factor to the success and performance of their supply chains. Through studying the Moroccan industrial companies, the concern of this article is to highlight the role of human resource function in the supply chain performance, in the light of the company culture and under the effect of a HRM practices influenced by the competitive environment, and the resulting mutations.

1 Introduction

As part of the supporting program of the strategic development planning, and in order to develop scenarios for Morocco of 2030, the High Planning Commission conducted a study on "the growth sources of economy in Morocco". This study revealed that the human capital is a key factor for growth by affirming: *"Human capital is an important ingredient of long-term growth; it [...] can counteract the decreasing returns to scale of other accumulative production factors - such as physical capital -. and sustain long-term growth. Apart from its direct role as a factor of production, human capital can serve as a complement to other resources and factors such as physical capital and natural resources"* [1].

This context highlights the required reactivity of organization forms particularly those of productive nature by mobilizing and combining diverse skills. This organizational work depends on the ability of the company to attract and mobilize competent and motivated human capital. Good human resource management still then an undeniable source of value creation that places man and his creative potential in the center of all managerial and organizational concerns of a company.

2 Relationship between supply chain and HRM strategies

Having been defined in several ways over the last 40 years, the modern logistics is understood today as a function of planning, implementation and mastery of flows and stocks in the company. It relies on the

implementation of information and communication systems increasingly sophisticated and takes place in the supply chain defined by Mentzer as *"a set of three or more entities (companies or individuals) through which flow upstream and downstream products of services, information and finance, from a supplier to a customer"* [2]. In terms of purpose, NFX 50-600 standard specifies that the purpose of the logistic function is to *"meet the needs expressed or latent, internal or external, to better economic conditions for a specific level of service"* [3]. This definition makes that the notion supply chain can accommodate different realities as proved by Chen & al [4]. Management practices flow may also differ from one chain to another, according to the way that the relationship in the supply chain is oriented: Relational Or transactional. Relational relationship is characterized by content (beginning, signals, end) of the communication between the partners in the chain and interaction's mode (speed and frequency), allowing enterprising sides to get goals which are unattainable individually. In transactional relationship, the terms of exchange between buyers and suppliers must be specific (low flexibility of suppliers). The benefits and costs of each member of the supply chain are clearly defined (low ease of provider); little information flow between the parties (poor communication); members of the supply chain have little control over each other (low control); transactions are short-lived and have little chance to train new (sustainability little intended). According to the vocabulary of sale, each member is satisfied with a result of "win-lose" provided that they are winning.

Therefore, despite of the challenges that the company may face [5], the guidelines of the supply chain must be adapted to the culture of the company that comes into

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mutual influence with HR policies. Indeed, decisions on human resource management have a significant impact because if staff adapts to the culture of the company, it helps to highlight social knowledge, as it helps in promoting cohesion between the objectives of the employee and those of the company. The fact that "Sharing a social conscience helps employees to make the right decisions in the face of changing circumstances" has been proven years ago [6].

In comparison to relations accommodated within the supply chain, human policies and the resulting culture can also be defined according to the Continuum transaction-relation. In other words, we distinguish the relationship-based HRM strategy which emphasizes the reciprocal loyalty between employees and the company and leads to a mutually beneficial relationship in the long run. And the transaction-based human resources strategy according to which employees are interchangeable and replaceable so that much less effort is provided to maintain their loyalty.

By combining the two logistic strategies with the two human resource strategies that a company can adopt, two of the four possible combinations are found to be compatible with both logistic and HRM objectives ("relational logistic-relational HRM" or "transactional logistic- Transactional HRM") while the other two combinations represent a strategic conflict:

2.1 Combined relational strategies:

Through adopting this type of strategy, the company's objective is to establish long-term cooperation with the majority of partners (customers, suppliers and distributors) and its own employees. A relationship-oriented firm strives to ensure coherence and complementarity between vendor and distributor' objectives in terms of human and marketing relationships, thus treating customers, suppliers and distributors alike leads to achieve a high level of cultural coherence that fosters mutual trust between the various enterprising parts (company, employee and different members of the supply chain).

In case of combined relational strategy, employees are seen as investments where the importance of shared responsibility and the "employee" factor dominate the human resource management (lifetime jobs, training, high wages, etc). Choi and Joung conducted a study based on the concept of combined HRM and supply chain management strategies [7].

2.2 Combined transactional strategies:

A company can also adopt a transactional approach regarding some or all of its supply chain partners as well as regarding its own employees. In this configuration, the loyalty of the employee towards the organization and the members of the supply chain is less considered. In this context, fidelity between a company and its suppliers or distributors is less solicited too.

In this scenario, assessing employees is based on the workload to quality dependency criterion. This results in the fact that employees are strictly defined and managed to achieve daily tasks with minimum qualifications. This

leads to situations where employees are replaceable and low paid as it can also lead to a further reduction in the efficiency of the services concerned after each personnel change.

2.3 Mixed strategy: long-term relationship with the supply chain members and transactional relation with employees

In this situation, the strategy of the supply chain is based on relationships while the human resources policy is transactional. Members of the supply chain may then receive transaction-level service. This is due to the fact the transactional HRM strategy prevents staff from providing a comprehensive and long-term service, especially since employees are not rewarded for the time dedicated to Maintaining long-term relationships because the reward system is linked to quantitative and transactional objectives. On the other hand, the HR strategy is based on simple and routine jobs that require a low-skilled workforce. Hence, employees are less able to provide the level of service required in a real relational environment.

2.4 Mixed strategy: short-term transaction with the supply chain members and strategy based on relationships with employees

In this case, the company may consider that the members of the supply chain are interchangeable, but it is attempts to get a long-term commitment from the employees. Despite the fact that maintaining a first-class workforce (skilled employees, continuing training and receiving high wages, etc.) for transactional works is one of the less economical aspects of this approach, but it lets the firm able to perform tasks that a member or a transaction chain is not capable of.

3 Objective of the study

The aim of this study is to highlight the mutual influence between supply chain performance and HRM practices through studying the example of industrial Moroccan companies.

4 Methodology

In this article we used a mixed method. The first part of our findings is based on the content analysis of some face to face interviews that we conducted among some HR managers.

We will also present an empirical part which is based on a quantitative research that we conducted among 109 managers based on the administration of a questionnaire. This search method requires the use of mathematical and statistical analysis tools to describe and explain the results through concepts operationalized in the form of measurable variables.

5 Participants

109 persons participated in this study. They belong to different sorts of companies: When 20.18% of these firms are subsidiaries of multinational companies, 22.94% (25) of them are very large companies (over than 1000 employees), 21.10% (23) are large businesses (500-999 employees), 18.35% (20) are medium-sized (50-499 employees), 11.93% (13) are small enterprises (10-49 employees), and 5.50% (6) are very small businesses (1-10 employees). These companies operate in various sectors including the food / fishing area (24.8%), building construction (19.3%), automotive industry (11%), and textile industry (11%), while 8.3% are mining or producing energy (9.2%). Among these enterprises, 14.7% have other activities such manufacturing health products, cosmetics, handicrafts ..., or product packaging. Eighty (73.4%) companies export their products. We made sure that all types of businesses, as well as different business sectors are represented.

6 Sample and procedure

To conduct this study, we searched first for contacts. As part of this, we visited the Chamber of Commerce and Industry which allowed us to have a database containing details of several leaders. We also visited some centers of national unions, in addition to our personal contacts.

On one hand, in the qualitative study we conducted structured interviews while using closed and semi-closed questions. This type of interviews ensures the levels of reliability and high precision, as it allows a better structuring of the debate, especially in the presence of several articles to cover.

On the other hand, during the empirical study we conceived and sent two versions of the questionnaire to participants' email addresses: a Web-based Survey, and a Word file questionnaire. This is done in order to allow the respondent to choose the form that is more comfortable for him or her to use. A cover letter explaining the purpose of the study, and ensuring the confidentiality of the information they can deliver, was also sent to the participants. At the same time, the participant himself can ensure the confidentiality of his answers by choosing the web-based survey which is anonymous.

Generally, we selected respondents using a reasonable choice sampling. This sampling method makes resort to the researcher's judgment to select sample items (Thiétart, 2003). As we are interested in this study to top managers, the participant status was one of the main selection criteria, in addition to the representation of all business sorts and sectors related to the industrial activity, as well as the various geographical regions of Morocco.

7 Measures

Our evaluation of HRF is based on the model of Dave Ulrich (1997) that assigns four main roles to the HRF: administrative expert, employees' champion, the change agent, and the strategic partner. This typology has been used by several researchers, including French, such as Gilbert and Charpentier (2004), or Peretti (1998).

Therefore we proposed subvariables to evaluate the four roles of HRF. For example the variable Documentation ($\alpha = 0.862$) is intended to assess the 'administrative' expert role ($\alpha=0.844$); employee incentive evaluates the role of employees' champion, communication assesses the role of change agent (0.853), while the participation of HR managers in strategic decision-making is intended to evaluate the role of strategic partner ($\alpha = 0.957$).

Some subvariables were declared by Gilbert and Charpentier (2004) as relevant. A subvariable can be measured through several items. Therefore, based on the Ulrich model, 37 items were used to evaluate the HRF performance only.

In this context, global, we used dichotomous and Likert scales according to the subvariable to measure. For instance, existing documentation processes were determined by a dichotomous scale ("Are the following HR Process documented?" Answer: yes / no); a global scale (check the appropriate(s) answer(s) from a list of proposals) was used to determine possible modes of communication between employees and senior managers; while Likert scale was used for other variables.

8 Analysis tools

For data analysis, we used SPSS data processing software. Having defined and coded variables, shuted the data matrix, and determined the appropriate tests... we have conducted various treatments (consistent with the encoding used), namely flat sorting, the cross tabulations, ANOVA analysis (ANalysis of Variance), chi-square tests.... The choice of mathematical tests used is justified by the literature of data analysis within social sciences (Rafael Costa & Masuy Stroobant, 2013).

9 Finding

9.1 Qualitative inquiry: Content analysis results

Regarding HRF structuring and company's performance, three main themes have emerged. Table1 provides a simplified description of the themes that we will discuss in detail later.

Table 1: Principal themes

	<u>Description</u>	<u>Comment example</u>
Theme 1	HRF structuration	"I cannot speak of an HR function"
Theme 2	HRF Performance	"It should be specified department just for HRM management"
Theme 3	Management practices	"There is no Occupational Medicine System"

9.1.1 Theme 1: HRF structuring

Through the interviews conducted, several respondents noted the lack of structuring at the HR function. As one respondent has mentioned:

"In fact, I cannot speak about an HR function, because as a HR manager I am just managing staff in its preliminary sense. In other words, my job is to check employees' presence, manage payroll and applications having relationship with the staff, display ..."

In addition to that, there was a feeling that the awareness concerning the importance of HR function contribution on the overall performance of the company was generally rare and often insufficient. As a participant pointed out, "It's rarely that we are interested in assessing the contribution of the HR function in the organization's performance "However, the commitment of the high direction to provide a well-structured HR function can be considered as a standard in the other companies that have a long history in integrating their human resources in order to achieve their objectives.

9.1.2 Theme 2: HRF performance

The second theme that emerged is linked to the performance of HRF. In this sense, we observed that it's hard for some companies to apply their internal administrative procedures as a participant bearing witness: *"Administrative procedures often cause cumulated delays"*, or as another also specified: *"even if the procedures are generally clear and well structured, but they are often rigid while being applied..."*. Rigidity regarding administrative procedures application is often found in companies with rigid hierarchical cultures.

Documentation is also a weakness that affects HRF performance. In this context, one interviewee noted, *"All the documentation is done by writing to registers or reports, there is no data record using computer tools"* Even in companies where there was a sufficient number of computers available, there was no guarantee that they are used for audio or video content delivery that can be used as traceability tool, or in order to develop management process that is used.

9.1.3 Theme 3: Management practices

The third theme focuses on emerging weaknesses related to management practices. To find out if industrial companies opt for the use of more advanced management practices, we sought how participant companies are applying the instructions of strategic workforce planning (SWP) and those of labor medicine.

This choice was based on the fact that the application of the SWP gives an idea about company's performance regarding administrative issues, while the adoption of labor medicine allows evaluating the enterprise regarding applying and executing the instructions.

Talking about the SWP, an HR manager of a medium sized company said: *"Based on the fact that our company has not yet exceeded the personnel management stage, so we do not apply strategic workforce planning because it requires the prior existence of certain conditions regarding the structuring of HR function, management tools ...and that's the thing we do not have until now"*. The testimony of this participant emphasized the existence of conditions while applying management methods.

In connection with the occupational medicine which is considered as a maturity indicator in terms of HRM, one respondent said: *"Our occupational medicine system is manifested through a doctor who comes to visit the corporate site every Wednesday. So if an employee has a health problem he can consult the doctor who makes decisions regarding health care, and who decides to allow him to take some rest, or to recommend that the employee changes his job inside the firm if his health case so requires"*. Another person reported *"We do not have metrological measures of risks that an employee may encounter within the company"*. Similar comments were frequently found particularly among small and medium sized enterprises.

9.2 Finding through the quantitative study

While assessing the HRF, we were inspired by the model of Ulrich (1996) in which he defines four roles of HRF. In this measurement, the results obtained are as follows:

9.2.1 The administrative expert role

By choosing "documentation" as one of the variables measuring the administrative role of the HRF, we noticed that companies are interested first in documenting recruitment processes and remuneration (fixed and variable), they focus then on employees' internal mobility, on documenting staff departures, and trainings process, followed by those related to social relations. Finally, they are interested in career management.

In line with this, 80 interviewees (73.8%) have affirmed that the companies to which they belong have a clear labor regulation that is well respected at an average of 80% by employees.

On the other hand, 78 (71.6%) companies use absenteeism indicators, seniority indicators (66.1%), effective indicators (64.2%), attendance (42.2%) and

performance (23.9%) indicators. They also use those related to wages assessment (6.4%), to turn-over rate (6.4%), and revealing outsourced function (7.3%), while only 3.7% establish an index estimating annual number of applications they receive.

Thus, analysis has shown a strong correlation between HRF performance and the “administrative expert role” ($r = 0.941$; $p = 0.000$). Figure 1 shows in advantage that the more a company is large-sized, the more the mastery of the administrative aspects promotes the HRF performance.

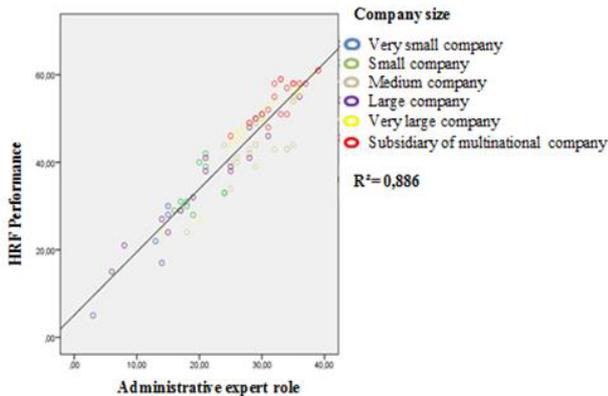


Figure 1. Relationship between HRF performance and the administrative expert role.

9.2.2 The employees' champion role

Among the participating firms in the survey, 18 companies (16.5%) encourage their employees to pursue their academic or professional studies, 59.6% have an integration system for new recruits, while 53.2% favor this integration through implementing a sharing experience system that promotes exchange between former employees and new recruits.

We also found that 75 (68.6%) companies encourage employees to propose solutions to labor problems, 66 (60.6%) enterprises supervise also new ideas' implementation, but only 42.2% (46) ensure the improvement of these solutions.

In order to have more detailed information concerning the contribution of “employees' champion role” in the overall performance of the HRF, we conducted a correlation analysis that results in: $r = -0.72$; $p = 0.472$ (non-significant relationship). This shows that the “employees' champion” role cannot be judged as being taken into consideration while promoting the HRF within industrial companies in Morocco. The relationship between “employees' champion role” and HRF performance is influenced by the business type.

9.2.3 The change agent role

As part of evaluating “communication” as being a determinant of change agent (Gilbert and Charpentier, 2004), we found that several communication modes are simultaneously possible. Indeed, 89 (81.7%) managers reported that their collaborators can communicate with

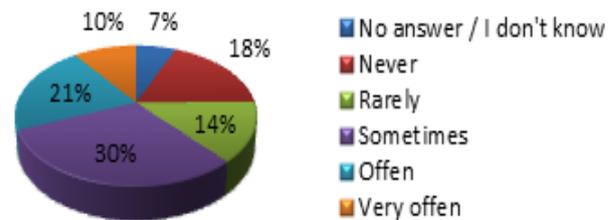
them in person (face to face) easily, while 63.6% stated that they can do it by phone. However, within 35 (32.1%) companies, an employee must make a request in order to communicate with the top manager, while in other firms (27.5%), the employee must go through his superior before seeing the top manager.

A correlation test shows the existence of a moderately strong relationship between the performance of HRF and the “change agent role” ($r = 0.450$), but it is highly significant ($p=0.00$).

9.2.4 The strategic partner role

“Strategic partner role” has a strong and positive correlation with the HRF performance ($r = 0.745$; $p < 0.01$). Among seventy two companies (66.1%) adopting a HRF, 52 respondents (47.7%) stated that the HRD takes part in the Management Committee, and participates in strategic decision-making at various frequencies (8.3% sometimes do, 44% are often involved in decision making, 3.7% do so very often).

In terms of control and efficiency of management systems, our survey reveals that only 31.19% of managers are often informed by policy and overall directions of HRM within their companies (Figure 2).



((21%) often and (10%) very often).

Figure 2. Being informed by human resource management policies

Besides; statistics indicate that 40% of participants no longer have the ability to access the information given by the management indicators. Others (18%) benefit from limited information.

The enquiry regarding the effectiveness of certain HRM systems showed that only 30.15% of managers can be judged satisfied regarding management systems within their businesses.

10 Discussion

The relationship between company size and structure of its HR function was predictable. The more a company is large the more we talk about steering committees, and functional departments. Thus a large number of people working in the same department requires some structuring to ensure the smooth progress of work.

However, it was clear that we must not confuse between company size and the adoption of an HR function. Indeed, according to our survey, we found that some small businesses adopt a “HR function”, while the

others are satisfied with the "personnel management". A slightly more detailed analysis showed that the first half consist of small companies (fewer employees), but are at the same time subsidiaries of multinational companies. This explains the existence of an HR function (a subsidiary of a multinational company) but not well structured (because of the reduced number of employees).

During our investigation, we found also that many respondents were unable to identify whether the HR department adopts a SWP although some spent 10 years in the business. This leads us to question the opening of HR departments to executives and managers of the company, as well as their integration into decision-making.

Based on the finding, it's clear that the HRF is giving more importance to the administrative issues than to the managerial ones. The role of "employees' champion" as well remains limited due to the influence of corporate culture which is closed in most cases.

In such context, many firms will continue to face obstacles because they are willing to be opened up economically but still managing their human resources according to outdated practices.

In this case, the solution remains in seeking the harmonization among the human resources in order to lead the supply chain to perform effectively because researches proved that "No dominance among supply chain members leads to the highest profit for the entire supply chain" [8], [9].

11 Conclusion

In conclusion, through this study, we wanted to focus on HRM applied within Moroccan industrial companies and perceived from the point of view of the top managers. Specifically, we have not only referred the assessment of the HR function in terms of structure and maturity, but we also targeted the description of the established management styles. Analyses of results found overturned or confirmed several assumptions.

Thus, involved in achieving the fundamental objectives of internal and external coordination of physical and information flows, responsiveness to hazards, primacy of logistical requirements, empirical knowledge of the status of human tissue sites, and adoption of adequate means; the HRM strongly contributes to the determination of practices within the supply chain, both operationally and strategically.

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